

## **EXPLORING FOR GEOTHERMAL ENERGY ON FEDERAL LANDS ACT**

OCTOBER 14, 2011.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. HASTINGS of Washington, from the Committee on Natural Resources, submitted the following

REPORT

together with

DISSENTING VIEWS

[To accompany H.R. 2171]

[Including cost estimate of the Congressional Budget Office]

The Committee on Natural Resources, to whom was referred the bill (H.R. 2171) to promote timely exploration for geothermal resources under existing geothermal leases, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Strike all after the enacting clause and insert the following:

## **SECTION 1. SHORT TITLE.**

This Act may be cited as the “Exploring for Geothermal Energy on Federal Lands Act”.

**SEC. 2. GEOTHERMAL EXPLORATION NOTICE AND EXCLUSION.**

(a) DEFINITION OF GEOTHERMAL EXPLORATION TEST PROJECT.—In this section the term “geothermal exploration test project” means the drilling of a well to test or explore for geothermal resources on lands leased by the Department of the Interior for the development and production of geothermal resources, that—

- the development and production of geothermal resources, that

  - (1) is carried out by the holder of the lease;
  - (2) causes—
    - (A) less than 5 acres of soil or vegetation disruption at the location of each geothermal exploration well; and
      - (B) not more than an additional 5 acres of soil or vegetation disruption during access or egress to the test site;
  - (3) is developed—
    - (A) no deeper than 2,500 feet;
    - (B) less than 8 inches in diameter;

- (C) in a manner that does not require off-road motorized access other than to and from the well site along an identified off-road route for which notice is provided to the Secretary of the Interior under subsection (c);
  - (D) without construction of new roads other than upgrading of existing drainage crossings for safety purposes; and
  - (E) with the use of rubber-tired digging or drilling equipment vehicles;
  - (4) is completed in less than 45 days, including the removal of any surface infrastructure from the site; and
  - (5) requires the restoration of the project site within 3 years to approximately the condition that existed at the time the project began, unless the site is subsequently used as part of energy development on the lease.
- (b) NEPA EXCLUSION.—Section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) shall not apply with respect to a project that the Secretary of the Interior determines under subsection (c) is a geothermal exploration test project.
- (c) NOTICE OF INTENT; REVIEW AND DETERMINATION.—
- (1) REQUIREMENT TO PROVIDE NOTICE.—A leaseholder intending to carry out a geothermal exploration test project shall provide notice to the Secretary of the Interior not later than 30 days prior to the start of drilling under the project.
  - (2) REVIEW OF PROJECT.—The Secretary shall by not later than 10 days after receipt of a notice of intent under paragraph (1) from a leaseholder—
    - (A) review the project described in the notice and determine whether it is a geothermal exploration test project under subsection (a); and
    - (B) notify the leaseholder—
      - (i) that under subsection (b) of this section, section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) does not apply to the project; or
      - (ii) that section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) applies to the project, including clear and detailed findings on any deficiencies in the project that preclude the application of subsection (b) of this section to the project.
  - (3) OPPORTUNITY TO REMEDY.—If the Secretary provides notice under paragraph (2)(B)(ii) that section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) applies to the project, the Secretary shall provide the leaseholder an opportunity to remedy the deficiencies described in the notice prior to the date the leaseholder intended to start of drilling under the project.

#### PURPOSE OF THE BILL

The purpose of H.R. 2171, as ordered reported, is to promote timely exploration for geothermal resources under existing geothermal leases.

#### BACKGROUND AND NEED FOR LEGISLATION

Geothermal energy can be used for electricity production, for commercial, industrial, and residential direct heating purposes, and for heating and cooling through geothermal heat pumps. To develop geothermal electricity, wells bring geothermal water to the surface, where its heat energy is converted into electricity at a geothermal power plant. Geothermal heat can also be used without involving a power plant or heat pump for applications such as space heating and cooling, food preparation, greenhouses, and agriculture.

The U.S. Geological Survey estimates that the geothermal industry has the potential to generate 39,000 megawatts of electricity in the United States using existing technologies. There are currently an estimated 144 projects under development in the U.S. These projects are projected to produce 624,000 construction jobs and will require \$26 billion in capital over the next five years, 50 percent of which will be allocated to the exploration and drilling phases.

The Bureau of Land Management (BLM) regulates geothermal project development. To test for geothermal resources on BLM land, a project developer must hold a lease for the corresponding

land area. Currently, there is a separate application submitted for each project development phase that must be approved by BLM before the phase can commence. The process of drilling a well simply to test for geothermal resources requires both a permit and a National Environmental Policy Act (NEPA) review and frequently takes 10 months, but can be tied up in the review process for more than a year. When a company has to drill multiple holes for exploration, and possibly additional subsequent holes, all which require repeating this process, geothermal resources are not being expeditiously discovered and utilized.

The Exploring for Geothermal Energy on Federal Lands Act (H.R. 2171) facilitates the development of geothermal energy resources by streamlining regulations that hamper exploration. The legislation would waive NEPA requirements for a geothermal exploration test project so a project can quickly move forward if resources are found. These temporary test projects create minimal surface disturbance, do not require off-road motorized access other than to and from the well site, and are typically restored to the land's original condition following the conclusion of the project.

#### COMMITTEE ACTION

H.R. 2171 was introduced on June 14, 2011, by Congressman Raúl Labrador (R-ID). The bill was referred to the Committee on Natural Resources, and within the Committee to the Subcommittee Energy and Mineral Resources. On June 23, 2011, the Subcommittee on Energy and Mineral Resources held a hearing on the bill. On July 13, 2011, the Full Resources Committee met to consider the bill. The Subcommittee on Energy and Mineral Resources was discharged by unanimous consent. Congressman Raúl Labrador (R-ID) offered an amendment; the amendment was adopted by voice vote. Congressman John Garamendi (D-CA) offered an amendment designated .057; the amendment was withdrawn. Congressman Ed Markey (D-MA) offered an amendment designated .002; the amendment was not adopted by a bipartisan roll call vote of 15–26, as follows:

**Committee on Natural Resources**

U.S. House of Representatives  
112<sup>th</sup> Congress

Date: July 13, 2011

Recorded Vote #: 3

Meeting on / Amendment: [HR 2171](#) – An amendment offered by Mr. Markey.002 was NOT AGREED TO by a roll call vote of 15 yeas and 26 nays.

MEMBERS	Yea	Nay	Pres	MEMBERS	Yea	Nay	Pres
<b>Mr. Hastings, WA Chairman</b>		X		<i>Mr. Heinrich, NM</i>	X		
<i>Mr. Markey, MA Ranking</i>	X			<b>Mr. Benishek, MI</b>		X	
<b>Mr. Young, AK</b>		X		<i>Mr. Lujan, NM</i>	X		
<i>Mr. Kildee, MI</i>				<b>Mr. Rivera, FL</b>		X	
<b>Mr. Duncan of TN</b>				<i>Mr. Sarbanes, MD</i>	X		
<i>Mr. Defazio, OR</i>	X			<b>Mr. Duncan of SC</b>		X	
<b>Mr. Gohmert, TX</b>				<i>Ms. Sutton, OH</i>	X		
<i>Mr. Faleomavaega, AS</i>				<b>Mr. Tipton, CO</b>		X	
<b>Mr. Bishop, UT</b>		X		<i>Ms. Tsongas</i>	X		
<i>Mr. Pallone, NJ</i>	X			<b>Mr. Gosar, AZ</b>		X	
<b>Mr. Lamborn, CO</b>		X		<i>Mr. Pierluisi, PR</i>	X		
<i>Mrs. Napolitano, CA</i>	X			<b>Mr. Labrador, ID</b>		X	
<b>Mr. Wittman, VA</b>		X		<i>Mr. Garamendi, CA</i>	X		
<i>Mr. Holt, NJ</i>				<b>Ms. Noem</b>		X	
<b>Mr. Broun, GA</b>				<i>Ms. Hanabusa, HI</i>	X		
<i>Mr. Grijalva, AZ</i>	X			<b>Mr. Southerland</b>		X	
<b>Mr. Fleming, LA</b>		X		<b>Mr. Flores, TX</b>		X	
<i>Ms. Bordallo, GU</i>	X			<b>Mr. Harris, TX</b>		X	
<b>Mr. Coffman, CO</b>		X		<b>Mr. Landry, LA</b>		X	
<i>Mr. Costa, CA</i>		X		<b>Mr. Fleischmann, TX</b>		X	
<b>Mr. McClintonck, CA</b>		X		<b>Mr. Runyan, NJ</b>		X	
<i>Mr. Boren, OK</i>		X		<b>Mr. Johnson, OH</b>		X	
<b>Mr. Thompson, PA</b>		X					
<i>Mr. Sablan, CNMI</i>	X						
<b>Mr. Denham, CA</b>		X					
				<b>TOTALS</b>	15	26	

The bill, as amended, was then ordered favorably reported to the House of Representatives by a bipartisan roll call vote of 26–16, as follows:

**Committee on Natural Resources**

U.S. House of Representatives  
112<sup>th</sup> Congress

Date: July 13, 2011

Recorded Vote #: 4

Meeting on / Amendment: [HR 2171](#) – Favorably reported to the House of Representatives, as amended, by a roll call vote of 26 yeas and 16 nays.

MEMBERS	Yea	Nay	Pres	MEMBERS	Yea	Nay	Pres
<b>Mr. Hastings, WA Chairman</b>	X			<i>Mr. Heinrich, NM</i>		X	
<i>Mr. Markey, MA Ranking</i>		X		<b>Mr. Benishek, MI</b>	X		
<b>Mr. Young, AK</b>	X			<i>Mr. Lujan, NM</i>		X	
<i>Mr. Kildee, MI</i>				<b>Mr. Rivera, FL</b>	X		
<b>Mr. Duncan of TN</b>				<i>Mr. Sarbanes, MD</i>		X	
<i>Mr. Defazio, OR</i>		X		<b>Mr. Duncan of SC</b>	X		
<b>Mr. Gohmert, TX</b>				<i>Ms. Sutton, OH</i>		X	
<i>Mr. Faleomavaega, AS</i>				<b>Mr. Tipton, CO</b>	X		
<b>Mr. Bishop, UT</b>	X			<i>Ms. Tsongas</i>		X	
<i>Mr. Pallone, NJ</i>		X		<b>Mr. Gosar, AZ</b>	X		
<b>Mr. Lamborn, CO</b>	X			<i>Mr. Pierluisi, PR</i>		X	
<i>Mrs. Napolitano, CA</i>		X		<b>Mr. Labrador, ID</b>	X		
<b>Mr. Wittman, VA</b>	X			<i>Mr. Garamendi, CA</i>		X	
<i>Mr. Holt, NJ</i>		X		<b>Ms. Noem</b>	X		
<b>Mr. Broun, GA</b>				<i>Ms. Hanabusa, HI</i>		X	
<i>Mr. Grijalva, AZ</i>		X		<b>Mr. Southerland</b>	X		
<b>Mr. Fleming, LA</b>	X			<b>Mr. Flores, TX</b>	X		
<i>Ms. Bordallo, GU</i>		X		<b>Mr. Harris, TX</b>	X		
<b>Mr. Coffman, CO</b>	X			<b>Mr. Landry, LA</b>	X		
<i>Mr. Costa, CA</i>	X			<b>Mr. Fleischmann, TX</b>	X		
<b>Mr. McClintonck, CA</b>	X			<b>Mr. Runyan, NJ</b>	X		
<i>Mr. Boren, OK</i>	X			<b>Mr. Johnson, OH</b>	X		
<b>Mr. Thompson, PA</b>	X						
<i>Mr. Sablan, CNMI</i>		X					
<b>Mr. Denham, CA</b>	X						
				<b>TOTALS</b>	26	16	

## SECTION-BY-SECTION ANALYSIS

*Section 1. Short title*

This Act may be cited as the “Exploring for Geothermal Resources on Federal Lands Act.”

*Section 2. Geothermal exploration notice and exclusion*

This section waives NEPA requirements for any geothermal exploration test hole project. It requires a leaseholder to provide notice to the Secretary of the Interior no later than 30 days prior to the start of drilling under the project. It also requires the Secretary to review the notice of intent within 10 days after receipt.

## COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Regarding clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee on Natural Resources’ oversight findings and recommendations are reflected in the body of this report.

## COMPLIANCE WITH HOUSE RULE XIII

1. Cost of Legislation. Clause 3(d)(1) of rule XIII of the Rules of the House of Representatives requires an estimate and a comparison by the Committee of the costs which would be incurred in carrying out this bill. However, clause 3(d)(2)(B) of that Rule provides that this requirement does not apply when the Committee has included in its report a timely submitted cost estimate of the bill prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act of 1974. Under clause 3(c)(3) of rule XIII of the Rules of the House of Representatives and section 403 of the Congressional Budget Act of 1974, the Committee has received the following cost estimate for this bill from the Director of the Congressional Budget Office:

*H.R. 2171—Exploring for Geothermal Energy on Federal Lands Act*

H.R. 2171 would exempt certain geothermal exploration projects from complying with provisions of the National Environmental Policy Act (NEPA). Based on information from the Bureau of Land Management (BLM), CBO estimates that implementing the legislation would have no significant impact on the federal budget. Enacting H.R. 2171 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

Under the bill, geothermal exploration projects that meet certain requirements related to the duration of the activities, the amount of land disturbed, and the restoration of the project site would not be required to obtain an environmental impact review under NEPA. The Secretary of the Interior would have 10 days to review proposed projects to determine whether they meet the requirements necessary to obtain a NEPA exemption. Based on information provided by BLM, CBO estimates that implementing the legislation would have a negligible impact on the agency’s workload.

H.R. 2171 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments.

The CBO staff contact for this estimate is Jeff LaFave. The estimate was approved by Theresa Gullo, Deputy Assistant Director for Budget Analysis.

2. Section 308(a) of Congressional Budget Act. As required by clause 3(c)(2) of rule XIII of the Rules of the House of Representatives and section 308(a) of the Congressional Budget Act of 1974, this bill does not contain any new budget authority, spending authority, credit authority, or an increase or decrease in revenues or tax expenditures. CBO estimates that implementing the legislation would have no significant impact on the federal budget. Enacting H.R. 2171 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

3. General Performance Goals and Objectives. This bill does not authorize funding and therefore, clause 3(c)(4) of rule XIII of the Rules of the House of Representatives does not apply.

#### EARMARK STATEMENT

This bill does not contain any Congressional earmarks, limited tax benefits, or limited tariff benefits as defined under clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives.

#### COMPLIANCE WITH PUBLIC LAW 104-4

This bill contains no unfunded mandates.

#### PREEMPTION OF STATE, LOCAL OR TRIBAL LAW

This bill is not intended to preempt any State, local or tribal law.

#### CHANGES IN EXISTING LAW

If enacted, this bill would make no changes in existing law.

## DISSENTING VIEWS

We oppose H.R. 2171 because it would exempt certain geothermal exploration activities on public lands from federal review under the National Environmental Policy Act (NEPA). This is a reckless measure that would eliminate the ability of federal land managers to review certain projects to ensure that they do not threaten public health and safety, endangered species and critical habitat, or nearby geysers, hot springs, or other geothermal features of value.

The Bureau of Land Management (BLM) currently has the authority to use the “categorical exclusion” process to expedite the approval of geothermal test wells when it is confident that drilling will not have negative unanticipated consequences. H.R. 2171 attempts to statutorily recreate BLM’s technical specifications for projects eligible for this type of expedited processing. However, by exempting the project entirely from the NEPA process, the bill removes the ability for permitting agencies to address extraordinary circumstances that are beyond what is specifically mentioned in the statute. The BLM currently allows for 12 types of “extraordinary circumstances” that could trigger a NEPA review, including projects which may have significant impacts on public health or safety, significant impacts on park lands or unique geographic characteristics, and projects that have highly uncertain and potentially significant environmental effects. Under H.R. 2171, geothermal test projects would be exempted from this consideration.

Before dismantling the current regulatory framework for permitting geothermal test well projects, it should be noted that most projects are currently granted expedited categorical exclusions. Over the last four years, the BLM has reviewed 72 applications to drill geothermal test wells. For 49 of those applications, or 68 percent, a categorical exclusion or other expedited process was utilized for quick project approval. For 23 projects, or 32 percent, the BLM required an environmental assessment prior to approving the project. Under H.R. 2171, the BLM would have been forced to approve those 23 projects without any review under NEPA regardless of the potential risks that these projects might present.

We agree that in most cases, doing minimally-invasive renewable resource assessment activities on public lands—including the activities covered under this bill as “geothermal exploration test projects”—should be encouraged and should not require an extended permitting schedule. However, there is a critically important difference between providing for expedited permitting most of the time, and exempting an entire category of projects from NEPA review all of the time. The approach in H.R. 2171 is the latter, which fails to consider the need for our federal land managers to have the flexibility to consider extraordinary circumstances.

Geothermal industry groups have not endorsed H.R. 2171. In fact, at the legislative hearing on this bill, the geothermal witness stated that his industry would be very happy if, instead of a blanket NEPA waiver, the BLM simply used its current categorical exclusion authority more aggressively. That is an indication that implementation, rather than policy, should be the focus of committee work in this area. Furthermore, the overwhelming body of testimony that this committee has received with regard to renewable energy development on public lands has indicated that the effectiveness and timeliness of permitting has improved markedly under the current Administration.

During the mark up of this bill, an amendment was offered by Ranking Member Markey that would require the Secretary of Interior to certify that a proposed geothermal test well project would not have an adverse impact on any significant thermal features within any unit of the National Park System. Since the geysers and hot springs that attract millions of visitors to our National Parks every year can be impacted by changes in the subsurface hydrology many miles away, this amendment would have provided these thermal features an important safeguard from unregulated exploratory activities that would now be allowed under the bill. The amendment was defeated 26–15, with all Republicans opposing.

H.R. 2171 is unnecessary for permitting most exploratory geothermal activities and environmentally risky in rare circumstances where environmental analysis is necessary. The renewable energy industry has not suggested this solution and has not endorsed the legislation. We oppose it.

EDWARD J. MARKEY.  
GREGORIO KILILI CAMACHO  
SABLAN.  
COLLEEN W. HANABUSA.  
RUSH HOLT.  
GRACE F. NAPOLITANO.  
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